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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,654	10/02/2000	Michael James Knee	87805-9010	9007

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EXAMINER

VO, TUNG T

ART UNIT PAPER NUMBER

2613

DATE MAILED: 11/25/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,654

Applicant(s)

KNEE, MICHAEL JAMES

Examiner

Tung T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The electronic information disclosure statement (IDS) submitted on 09/26/03 has been acknowledged.

Response to Arguments

2. Applicant's arguments, see the remarks of the amendment A, filed 07/10/03, with respect to the rejection(s) of claim(s) 1-11 under 102 (e) and 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the prior art.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kojima et al. (US 6,057,893).

Re claims 1 and 9, Kojima discloses a compression pre-processing apparatus having a video signal process (figs. 6B), wherein the apparatus comprising:

means for carrying out the step of analyzing a video signal and taking compression coding decisions (101, 102, 103 and 44 of fig. 6B);

means for carrying out the step of processing the coding decisions (45, 46, 47 of fig. 6B);

means for carrying out the step of outputting the processed coding decisions for passage with the video signal along a video pathway (45, 46 of fig. 6B, e.g. the quantized coefficient bit stream is input to a VLC (47 of fig. 6B)).

Kojima further discloses the step of forming a presentation of the coding decisions for passage with video signal along a video pathway (44, 103 of fig. 6B, e.g. the prediction circuit forms the coding decisions, forward or backward or bi-directional mode, for encoding process, see also col. 6, lines 13-63); and downstream of the video pathway compression encoding the video signal in accordance with said coding decision (47 of fig. 6B, e.g. the VLC (47) capably encodes video picture with the coding decisions).

Re claim 2, Kojima further discloses wherein said representation of the coding decision comprises an information bus in which the coding decisions are represented in the same format as they are represented in the compressed bit-stream (the selected image is encoded by VLC has

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the same format through out the DCT, Quantization and VLC (45, 46, 47 of fig. 6B) which is the output of said downstream compression coding operation (VLC 47 of fig. 6B, called downstream compression coding).

Re claim 3, Kojima further discloses wherein analysis generates information relating the picture size and type (the MPEG-2 stream consists of group of picture GOPs, the GOP consists of I, P, and B frames, and the I, P, and B frames comprises horizontal and vertical sizes, (101, 102 of fig. 6B; cols. 1, 4, and 5).

Re claim 4, Kojima further discloses wherein analysis comprises the generation of candidate of a motion vector (101 of fig. 6B).

Re claim 5, Kojima further discloses wherein analysis comprises the selection for each macro-block of the picture of a motion vector from said candidate motion vectors (101 of fig. 6B, the motion detection circuit estimates a motion vector based upon the possible candidate locations in the search window are used to find the best match, so this can produce the best motion vectors for the selection, see also col. 5, lines 25-49, and col. 6, lines 13-35).

Re claim 6, Kojima further discloses said analysis comprises the selection of a macroblock prediction mode (44 of fig. 6B).

Re claim 7, Kojima further discloses wherein said analysis includes a bit rate control (33 of fig. 6B), and includes the taking of quantizer decisions appropriate to the maintenance of the selected bit rate (33 of fig. 6B).

Re claim 8, Kojima further discloses wherein plural bit rates are selected (49 of fig. 6B) and plural quantizer decisions are taken (33 of fig. 6B, see also col. 7, lines 1-15).

Re claim 10, Kojima further discloses wherein said means for processing the coding decisions provides a representation of the coding decisions in the form of a compressed video bit-stream lacking transform coefficients (the motion vectors of the motion detection (101 of fig. 6B) inputs to the VLC (47 of fig. 6B) without any transform coefficients).

Re claim 11, Kojima further discloses wherein said means for outputting processed coding decisions serves to modulate one or more least significant bits of video signal (the motion vector and coefficients can be combined to produce one or more least significant bits of the video signal using technique of MPEG (see col. 1, 4 and 5); and particularly an enhancement layer contains the least significant digits (bits) of the video signal).

5. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al. (US 6,535,556 B1) as shown in figure 3, cols. 3-11.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chung et al. (US 5,699,119) discloses a quantization method and circuit therefor.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



TUNG T. VO
PATENT EXAMINER

T.Vo

Tung T. Vo
Examiner
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